United States — Mathematics Grade 4

1. Improvement Over Time

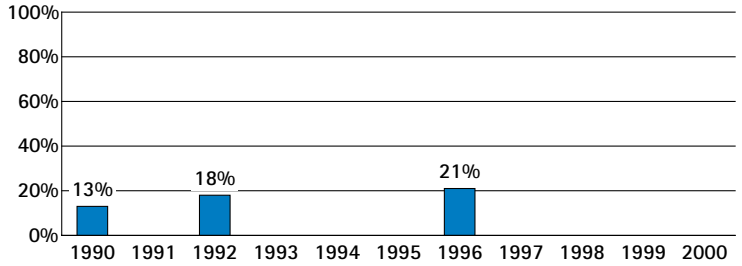
Have the nation's[1] 4th graders improved in mathematics achievement?

Yes. The percentage of 4th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1990, to 21% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

[1] *Figures shown for the U.S. include both public and nonpublic school data.*

Percentage of public and nonpublic school 4th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

2. State Comparisons†

How did the nation compare with states in 4th grade mathematics achievement in 1996?

4 states had significantly higher[1] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar[1] percentages of students who were at or above Proficient on NAEP:

New Jersey, Texas	25%	***U.S.,**** Alaska, North Carolina, Oregon, Washington	**21%**
Indiana, Massachusetts, Nebraska, North Dakota	24%	Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%
Colorado, Iowa, Maryland, Montana	22%		

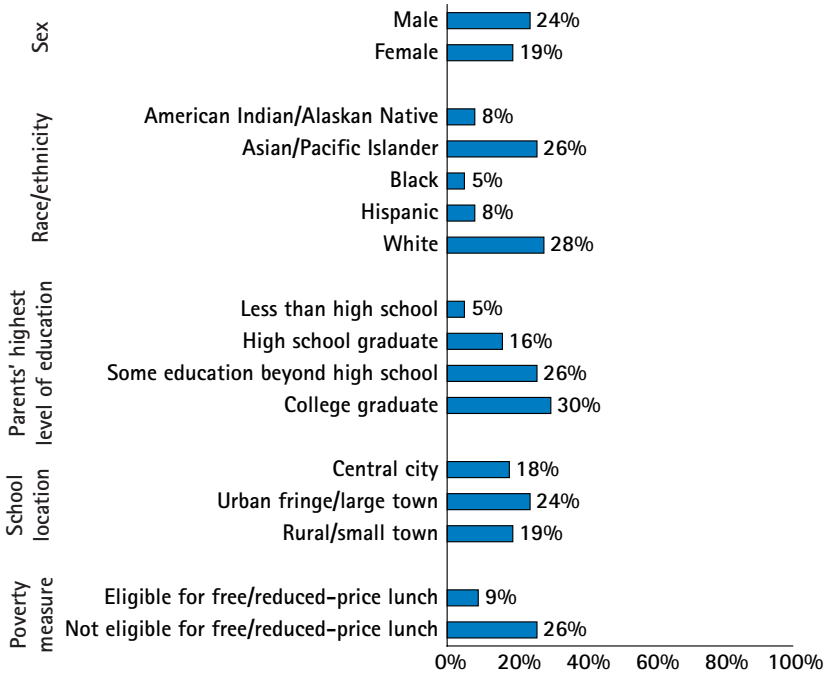
18 states had significantly lower[1] percentages of students who were at or above Proficient on NAEP:

Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

† The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
[1] See explanation on pp. 3-4.
* Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

3. Subgroup Performance

What percentages of 4th graders in different subgroups[1] in the nation[2] were at or above Proficient on the 1996 NAEP mathematics assessment?



[1] Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
[2] Figures shown for the U.S. include both public and nonpublic school data.

See Appendix A for definitions, sources, and technical notes.

1. Improvement Over Time

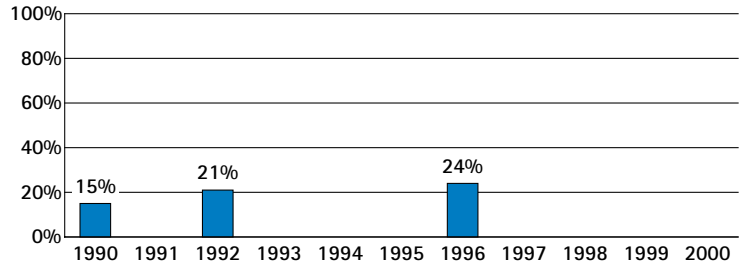
Have the nation's[1] 8th graders improved in mathematics achievement?

Yes. The percentage of 8th graders who met the Goals Panel's performance standard in mathematics increased from 15% in 1990, to 24% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

[1] *Figures shown for the U.S. include both public and nonpublic school data.*

Percentage of public and nonpublic school 8th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

2. State Comparisons†

How did the nation compare with states in 8th grade mathematics achievement in 1996?

9 states had significantly higher[1] percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%		

14 states had similar[1] percentages of students who were at or above Proficient on NAEP:

Massachusetts, Michigan	28%	***U.S.,**** Indiana, Maryland, Utah	**24%**
Vermont	27%	Missouri, New York, Wyoming	22%
Oregon, Washington	26%	Texas, Virginia	21%
Colorado	25%		

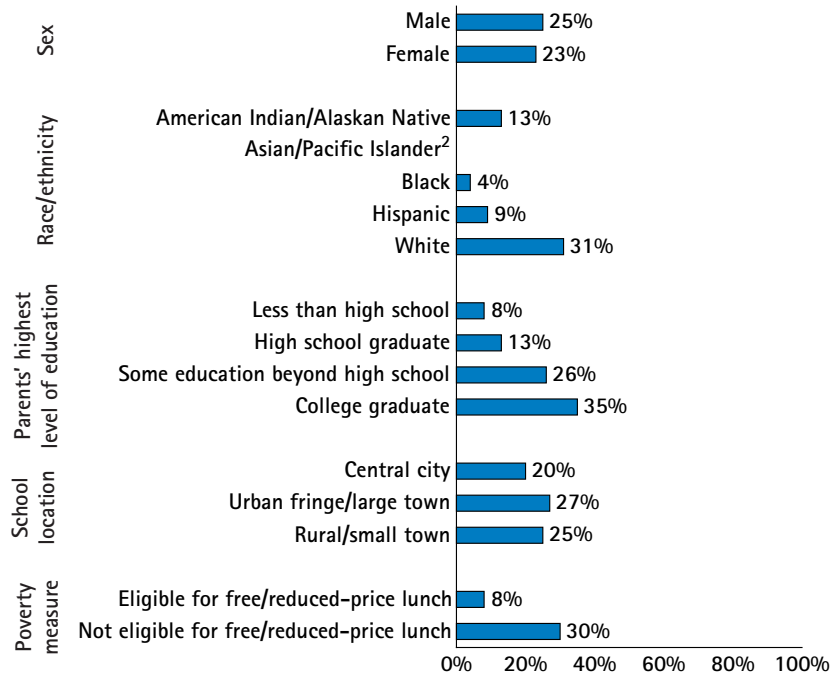
19 states had significantly lower[1] percentages of students who were at or above Proficient on NAEP:

North Carolina, Rhode Island	20%	Arkansas	13%
Delaware	19%	Alabama	12%
Arizona	18%	Louisiana, Mississippi	7%
California, Florida	17%	Guam	6%
Georgia, Hawaii, Kentucky	16%	District of Columbia	5%
Tennessee	15%		
New Mexico, South Carolina, West Virginia	14%		

† The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
[1] See explanation on pp. 3-4.
* Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

3. Subgroup Performance

What percentages of 8th graders in different subgroups[1] in the nation[3] were at or above Proficient on the 1996 NAEP mathematics assessment?



[1] Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
[2] NAEP quality control activities involving state assessment data raised concerns about accuracy of national Grade 8 Asian/Pacific Islander data. As a result, they have not been included in this report.
[3] Figures shown for the U.S. include both public and nonpublic school data.

See Appendix A for definitions, sources, and technical notes.

1. Improvement Over Time

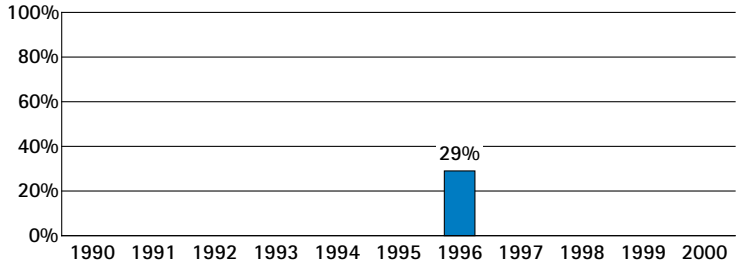
Have the nation's[1] 8th graders improved in science achievement?

In 1996, 29% of the nation's 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

[1] *Figures shown for the U.S. include both public and nonpublic school data.*

Percentage of public and nonpublic school 8th graders at or above Proficient on the NAEP science assessment



Science performance will be tested again in 2000.

2. State Comparisons†

How did the nation compare with states in 8th grade science achievement in 1996?

10 states had significantly higher[1] percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%	Wyoming[2]	34%

13 states had similar[1] percentages of students who were at or above Proficient on NAEP:

Vermont[2]	34%	Missouri	28%
Colorado, Michigan, Oregon, Utah	32%	New York, Virginia, Washington	27%
Alaska	31%	Rhode Island	26%
Indiana	30%	Maryland	25%
U.S.*	**29%**		

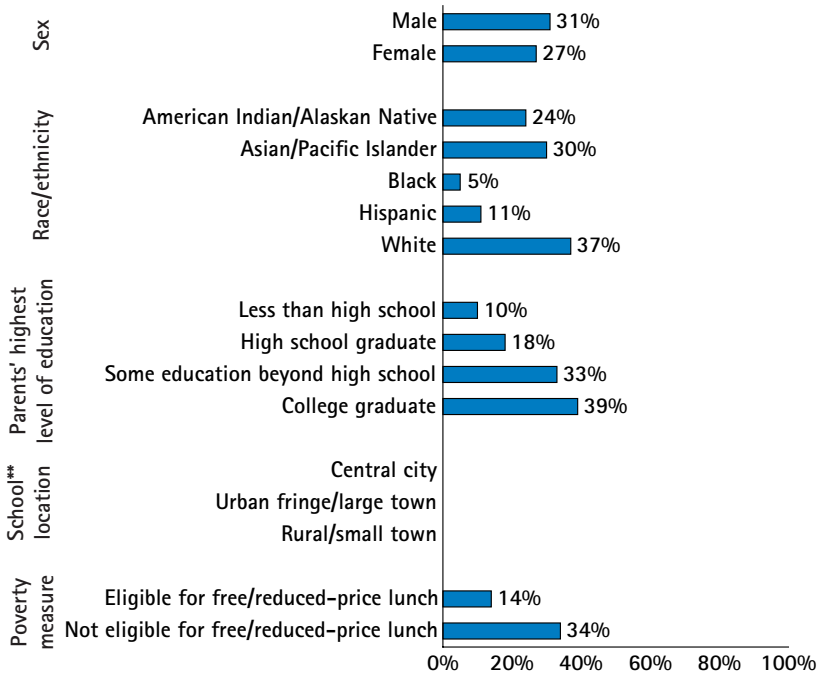
19 states had significantly lower[1] percentages of students who were at or above Proficient on NAEP:

North Carolina	24%	Alabama	18%
Arizona, Kentucky, Texas	23%	South Carolina	17%
Arkansas, Tennessee	22%	Hawaii	15%
Delaware, Florida, Georgia, West Virginia	21%	Louisiana	13%
		Mississippi	12%
California	20%	Guam	7%
New Mexico	19%	District of Columbia	5%

† The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
1 See explanation on pp. 3-4.
2 State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.
* Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

3. Subgroup Performance

What percentages of 8th graders in different subgroups[1] in the nation[2] were at or above Proficient on the 1996 NAEP science assessment?



1 Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
2 Figures shown for the U.S. include both public and nonpublic school data.
** No school location data for science in 1996.

See Appendix A for definitions, sources, and technical notes.

Mathematics Grade 8

Forty-one nations† participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. How did U.S. 8th graders compare to students in the other participating countries?

20 nations† performed significantly higher:[1]

(Australia)
(Austria)
Belgium – Flemish[2]
(Belgium – French)[2]
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
Switzerland

13 nations† performed similarly:[1]

(Denmark)
England
(Germany)
(Greece)
Iceland
(Israel)
Latvia – LSS[3]
New Zealand
Norway
(Romania)
(Scotland)
Spain
(Thailand)
United States

7 nations† performed significantly lower:[1]

(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
Lithuania
Portugal
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3-4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Science Grade 8

Forty-one nations† participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. How did U.S. 8th graders compare to students in the other participating countries?

9 nations† performed significantly higher:[1]

(Austria)
(Bulgaria)
Czech Republic
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

16 nations† performed similarly:[1]

(Australia)
Belgium – Flemish[2]
Canada
England
(Germany)
Hong Kong
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Sweden
Switzerland
(Thailand)
United States

15 nations† performed significantly lower:[1]

(Belgium – French)[2]
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
Latvia – LSS[3]
Lithuania
Portugal
(Romania)
(South Africa)
Spain

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3-4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

See Appendix A for definitions, sources, and technical notes.